

**Client:** Marin County Flood Control & Water Conservation District  
**Project Location:** San Anselmo Creek Park, San Anselmo, CA  
**Inspection Date:** April 29, 2025  
**Arborist:** Ben Anderson



## Assignment

An Bartlett asked me to assess the baseline conditions of the trees adjacent to the creek restoration project planned in the park and to provide recommendations to protect the trees during and after construction. Ms. Bartlett met me on site to discuss the project.

## Observations

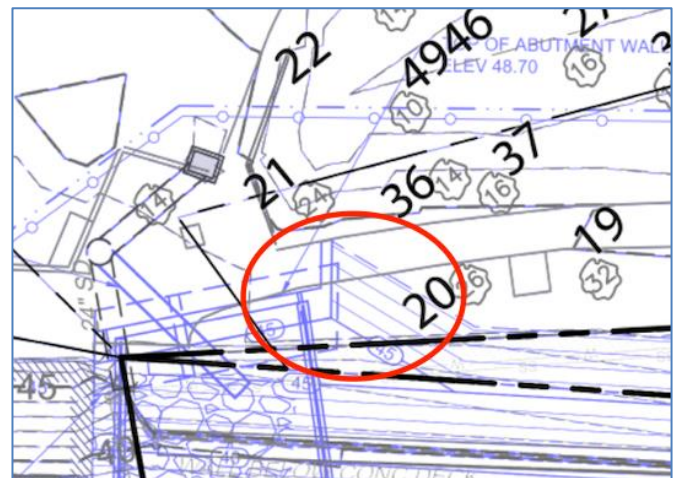
I identified each tree by number relative to the tags on the trees in the attached inventory and rated them for health, structure, and form. Photos of each tree can be made available upon request. I was provided the plan set, San Anselmo Flood Risk Reduction Project Building Bridge No. 2, dated September 15, 2023, to review. Most trees were previously tagged, so I used those numbers for my inventory. The project is to remove a structure that bridges across the creek, regrade the channel, and install a new shoring wall. No work is proposed north of the redwoods, but the grassy area is proposed as a staging area.

The most intrusive work will be along the line of redwoods on the creek's north side. There is an existing concrete curb with an unknown footing depth within 1-5 feet of the trunk bases. This is shown to be removed, and the area between the trees and the creek is to be regraded to make the ground gradually slope down from the trees to the creek channel. It is shown as a straight, uniformly sloping bank. The trees are generally healthy and do not appear to be significantly surface-rooted. A concrete sidewalk runs along their north side, which is only slightly lifted in a few spots. San Anselmo typically has good soils that allow for the deep rooting of redwoods.

Adjacent to Trees 20 and 21, two large redwoods at the line's north end, the excavation turns into the park and crosses the existing sidewalk. This will involve much greater root disturbance and possibly the removal of one or both trees, depending on the number and size of roots encountered.

Grading will stop 10 feet short of Tree 8 (see Figure 3), a mature coast live oak (*Quercus agrifolia*).

Alders (*Alnus sp.*) in the creek are heavily surface-rooted but healthy and stable. Grading is proposed upslope from the trees, but heavy machinery will be working close to them. One alder and one elm are proposed for removal to construct the retaining wall on the south side (Tree 4717). The creek's south bank is populated with cork elm sprouts (*Ulmus thomasii*) and a few larger stems. This tree is not native to Marin County and is slightly invasive.



**Figure 1. Screenshot of area of concern near Trees 20 & 21. Blue lines are proposed improvements which will cross the existing sidewalk and require significant excavation in the structural root zones.**

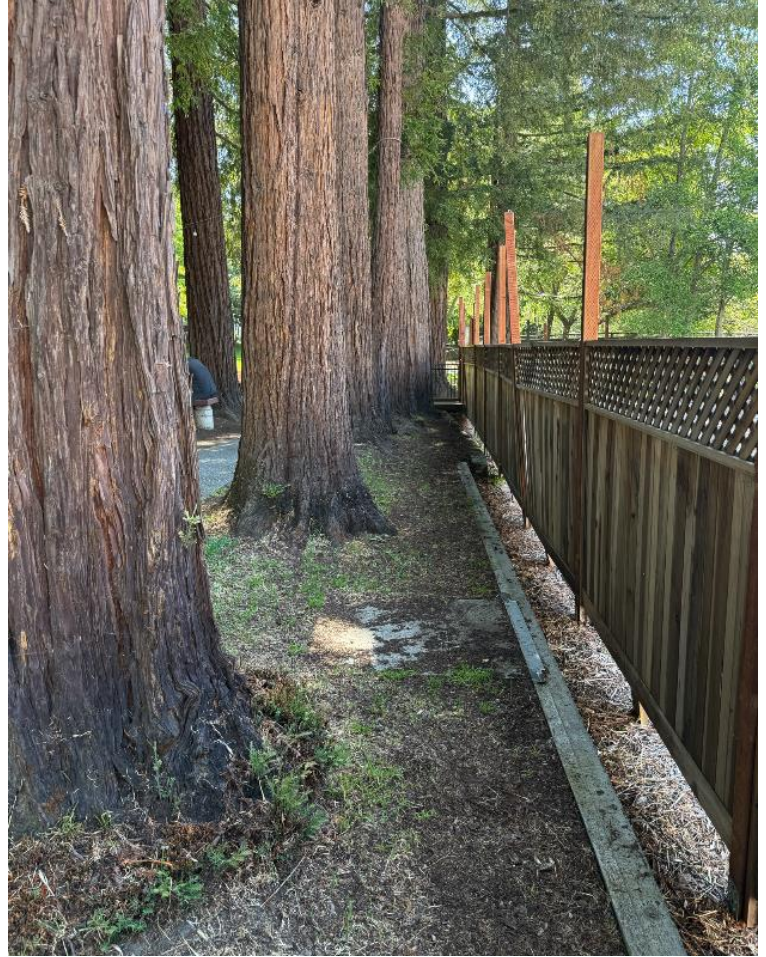
## Discussion

Coast redwood is very tolerant of construction impacts, both in terms of health and stability. Hopefully, the concrete curb will have directed the roots down, so that very few will be encountered during excavation. The area under the deck is also not likely to be hospitable root space, further increasing the likelihood roots grew

down. We cannot know where large roots will be until the concrete is removed.

### Recommendations

1. The contractor shall meet with the arborist before work commences to discuss tree protection, site access, material storage, and excavation practices.
2. Install tree protection fencing according to the attached map prior to work on site. Additional fencing may be specified during the meeting described in Step 1.
3. Remove only as much of the curb by the redwoods as necessary (Figure 2), as it is likely in contact with large, structural roots that should be not disturbed.
4. Adjust the grading on the bank below the redwoods to follow the existing grade as much as possible to mitigate excavation below Trees 13 and 4716.
5. The arborist shall be present during concrete removal and grading within 10 feet of the trunk of any redwood.
6. The arborist shall be present during the excavation near trees 20 & 21 to determine whether these trees can be retained.



**Figure 2. Line of redwoods adjacent to creek repair. The curb to the right of the trees will be removed, but only as deep as necessary to bury it.**

### Inspection Schedule

Inspection of site: Before Equipment and Materials Move In, Site Work, Demolition, and Tree Removal: The Project Arborist will meet with the General Contractor, Architect / Engineer, and Owner or their representative to review tree preservation measures, designate tree removals, delineate the location of tree protection / non-intrusion zone fencing, specify equipment access routes and materials storage areas, review the existing condition of trees and provide any necessary recommendations.

Inspection of site: After installation of Tree Protection Zone (TPZ) fencing: Inspect site for the adequate installation of tree preservation measures. Review any requests by the contractor for access, soil disturbance, or excavation areas within root zones of protected trees. Assess any changes in the health of trees since the last inspection. This can be done remotely with photos of fencing supplied by the contractor.

Inspection of site: During excavation or any activities that could affect trees: Inspect site during any activity within the TPZ of preserved trees and any recommendations implemented. Assess any changes in the health of trees since the last inspection.

Final Inspection of Site: After completion of construction, inspect for tree health and make any necessary recommendations.

## **ARBORIST'S CHECKLIST**

- An urban forester, certified or consulting arborist shall establish the Tree Protection Zone (TPZ) before starting the demolition. Four-foot-high metal wire deer fencing will be erected by the contractor and inspected by the arborist to limit access to the TPZ. This will protect the trunk and root zone throughout construction.
- The Arborist shall have a pre-demolition meeting with the contractor or responsible party and all other foremen or crew managers on site before any work to review all work procedures, access and haul routes, and tree protection. The contractor must notify the Arborist if roots are exposed or trunk or branches are wounded.
- For Any trunk and root crown that is not protected by a TPZ where heavy equipment operation is likely to wound the trunk, install a barrel stave-like trunk wrap out of 2 X 4 studs connected with metal straps, attached to the 2 X 4's with driver screws or one-inch nails.
- Storage of equipment shall be as far away from protected trees as possible and optimally on asphalt or ground protected by mulch/plywood.
- Heavy equipment use should be limited around trees and the roots. No equipment may be transported or used on the bare ground within the root zone. A 6-inch-deep layer of mulch and plywood must be placed under the path for access and egress. The protective "bridge" shall be maintained by the contractor and inspected by the arborist when on site.
- Any damage to trees due to demolition or construction activities shall be reported to the arborist within 6 hours so that remedial action can be taken. Any damage done to the trees in violation of the contract agreement shall be appraised as a casualty loss by the arborist and provided to the tree owner.
- All trenching within the TPZ shall be done pneumatically or by hand, carefully, so as not to damage any of the bark or any root encountered.
- An arborist shall inspect all grading, trenching, tunneling, or other excavation within the root zones of trees before backfilling.
- No chemicals or other waste materials shall be dumped within 20 feet of the base of any tree. There shall be no material storage in the TPZ.
- Any tree pruning will be done in accordance with ISA standards. The arborist will inspect all pruning.
- The arborist must perform a final inspection to ensure that no unmitigated damage has occurred and to specify any pest, disease, or other health care. The arborist shall specify and oversee any necessary restorative actions.
- Any suspected omissions or conflicts between various plan elements shall be brought to the attention of the arborist and resolved before proceeding with the work.

## SCOPE OF WORK AND LIMITATIONS

Urban Forestry Associates has no personal or monetary interest in the outcome of this investigation. All observations regarding trees in this report were made by UFA, independently, based on our education and experience. All determinations of health condition, structural condition, or hazard potential of a tree or trees at issue are based on our best professional judgment. The health and hazard assessments in this report are limited by the visual nature of the assessment. Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Since trees are living organisms, conditions are often hidden within the tree and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specific period of time. Likewise, remedial treatments cannot be guaranteed. Trees can be managed but they cannot be controlled. To live near trees is to accept some degree of risk and the only way to eliminate all risk associated with trees is to eliminate all trees.

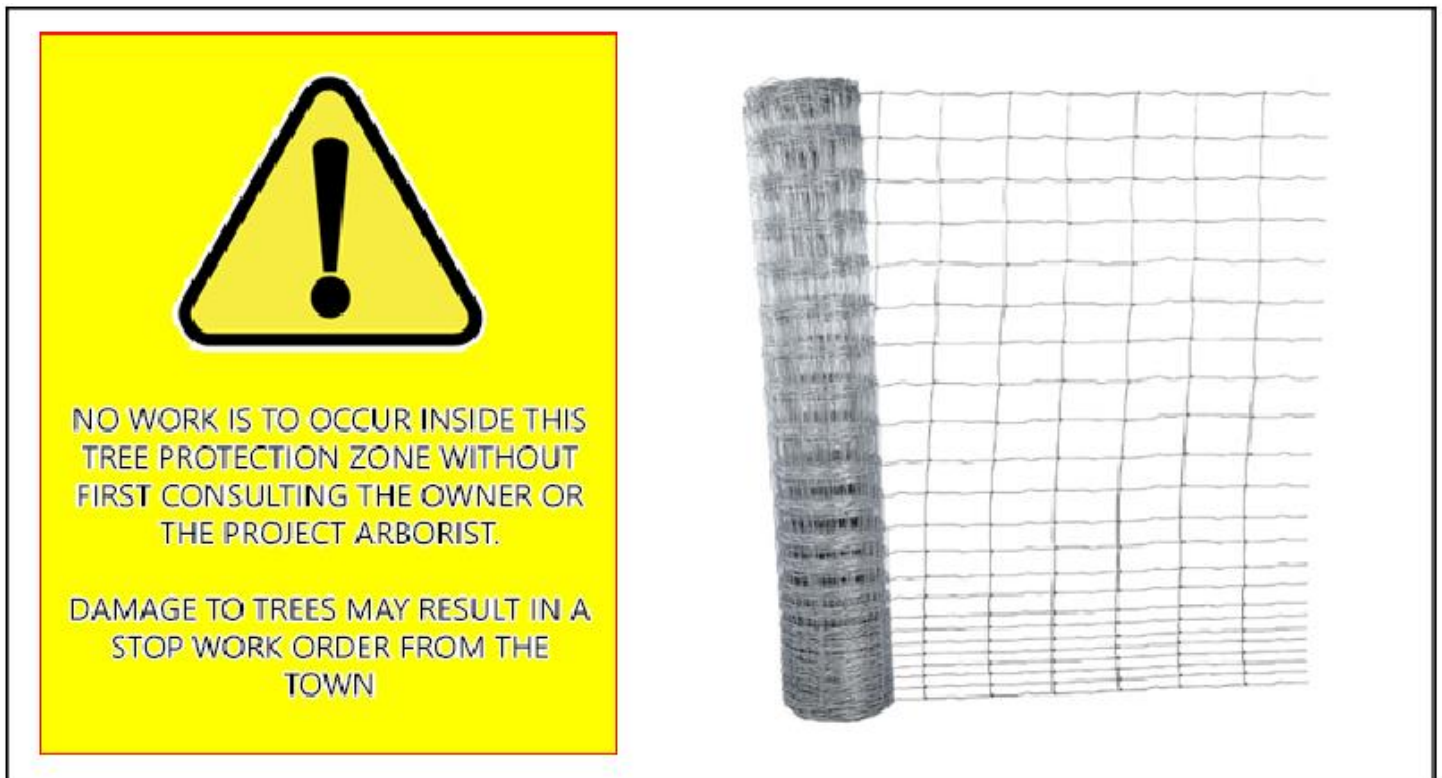


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**Figure 4. Tree fencing shall be a minimum of four-foot-high metal deer fence. The Fence shall be labeled with the signage shown.**

Tree Number	Species	Common Name	Diameter	Health	Structure	Form	Comments	Recommendations
3	Alnus sp.	Alder	12	Good	Good	Fair	Asymmetric canopy due to proximity to adjacent tree. Surface rooted.	
4	Alnus sp.	Alder	14.5 13	Good	Fair	Good	Weak main union	
5	Platanus x acerifolia	London Plane	25.5	Good	Good	Excellent		
7	Quercus sp. (Eastern)	Quercus sp.	19	Fair	Fair to Good	Good		
8	Quercus agrifolia	Coast live oak	16 15.5	Good	Fair	Fair to Good	Very weak main union. Leans over bridge and creek	
9	Sequoia sempervirens	Redwood	29.5	Good	Good	Fair to Good	Suppressed second stem at 10'	
10	Sequoia sempervirens	Redwood	21	Good	Good	Fair to Good		
11	Sequoia sempervirens	Redwood	41.5	Good	Good	Good	Shared base with 13	
12	Sequoia sempervirens	Redwood	38.5	Good	Good	Good	Shared base with tree 11	
13	Sequoia sempervirens	Redwood	10	Fair	Good	Poor to Fair	Heavily suppressed.	
14	Sequoia sempervirens	Redwood	10.5	Good	Good	Fair to Good	Suppressed	
15	Sequoia sempervirens	Redwood	33	Good	Good	Fair to Good	Edge tree with asymmetrical canopy. Roots lifting sidewalk.	
16	Sequoia sempervirens	Redwood	20.5	Good	Good	Fair to Good	Edge tree with asymmetrical canopy.	
17	Sequoia sempervirens	Redwood	15.5	Good	Good	Fair to Good	Edge tree with asymmetrical canopy. Lights installed on tree.	
18	Sequoia sempervirens	Redwood	27.5	Good	Good	Fair to Good	Edge tree with asymmetrical canopy. Roots lifting sidewalk.	
19	Sequoia sempervirens	Redwood	31.5	Good	Fair to Good	Fair	Edge tree with asymmetrical canopy. Broken/removed top.	
20	Sequoia sempervirens	Redwood	25.5	Good	Good	Fair to Good	Edge tree with asymmetrical canopy. Lights installed on tree.	Arborist must be present during excavation near trees which may need to be removed if large roots are cut.
21	Sequoia sempervirens	Redwood	26.5 24 22	Good	Fair	Fair to Good	Three stems arise from grade and are poorly attached. Edge tree with asymmetric canopy.	
36	Sequoia sempervirens	Redwood	12.5	Good	Good	Fair	Suppressed interior tree	
37	Sequoia sempervirens	Redwood	16.5	Good	Good	Fair	Slightly suppressed interior tree	
100	Sequoia sempervirens	Redwood	17	Good	Good	Fair to Good	Slightly suppressed interior tree	
101	Sequoia sempervirens	Redwood	34	Good	Good	Good		
102	Ulmus thomasii	Cork elm	10	Good	Good	Fair to Good		Remove for construction and invasive nature

Tree Number	Species	Common Name	Diameter	Health	Structure	Form	Comments	Recommendations
4712	Alnus sp.	Alder	13.5	Good	Fair to Good	Fair to Good		
4716	Sequoia sempervirens	Redwood	29.5 15.5	Good	Good	Fair	Asymmetric canopy due to proximity to adjacent larger trees	
4717	Alnus sp.	Alder	14	Good	Good	Fair to Good		Remove for construction
4718	Alnus sp.	Alder	8	Good	Good	Fair to Good		
4964	Quercus lobata	Valley oak	12.5	Good	Fair to Good	Good	Weak main union	
4975	Sequoia sempervirens	Redwood	14	Fair	Good	Fair	Suppressed	
4976	Sequoia sempervirens	Redwood	28.5 25 25	Good	Fair to Good	Good	Three codominant trunks, and one suppressed trunk join just above grade	